

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of treating a solution comprising nitrate and a metal halide, comprising:
eluting an ion exchange column to which nitrate is bound with an eluent that includes a metal halide to thereby form a solution comprising the nitrate and the metal halide;
(I) subjecting the solution to an electrochemical reduction to thereby reduce the nitrate to ammonia, nitrogen, and nitrite, wherein the solution has a nitrate concentration of at least 500 mg/l and a metal halide content of at least 10 wt% prior to reduction;
(II) subjecting the solution from step (I) after reduction to an electrochemical oxidation in the presence of the metal halide to thereby oxidize the ammonia to nitrogen, the nitrite to nitrate, and the metal halide to a metal hypohalite; and
(III) using monitoring an oxidation/reduction potential of the solution as an indicator to discontinue oxidation of step (II) to prevent hypohalite formation exceeding a predetermined concentration, or subjecting the solution from step (II) to an electrochemical reduction to thereby reduce the metal hypohalite to the metal halide;
using the solution comprising the metal halide from step (III) as a regenerated eluent in a subsequent elution of nitrate from the ion exchange resin to thereby produce a loaded regenerated eluent comprising the nitrate and the metal halide; and
subjecting the loaded regenerated eluent to steps (I)-(III).
2. (canceled).
3. (canceled).
4. (Original) The method of claim 1 wherein the solution comprising the metal halide from step (III) comprises less than 10 mol% of the nitrate contained in the solution of step (I) before reduction, and less than 10 ppm nitrite.

5. (Original) The method of claim 1 wherein at least one of steps (II) +(III) and steps (I) +(II) are performed in a single electrochemical compartment.
6. (Original) The method of claim 1 wherein reduction is performed using an electrode comprising carbon felt.
7. (Original) The method of claim 1 wherein oxidation is performed using an electrode comprising platinized titanium.
8. (Original) The method of claim 1 wherein alkalinity of the solution in steps (I), (II), and (III) is maintained at a value between pH 7.0 and 9.5.
9. (currently amended) A method of reducing a nitrate concentration in a solution, comprising:
providing an anion exchange resin having nitrate anions bound thereto, and eluting the nitrate anions with a metal halide eluent to thereby produce an eluent comprising at least 500 mg/l nitrate ions and at least 10 wt% metal halide ions;
transferring the eluent into a cathode compartment and reducing the nitrate ions in the eluent at a cathode to form ammonia ions and optionally gaseous nitrogen;
transferring the eluent after reduction into an anode compartment and oxidizing at least some of the ammonia ions at the anode to form nitrogen, wherein at least another part of the ammonia ions is oxidized using hypohalite ions that are generated at the same time at the anode from the halide ions; and reducing the hypohalite ions at the cathode to regenerate the metal halide eluent; and
using the regenerated metal halide eluent in a subsequent elution of the anion exchange resin.
10. (Original) The method of claim 9 wherein the step of reducing the nitrate ions produces at least some nitrite ions, and wherein the nitrite ions are oxidized back to nitrate at the anode in the step of oxidizing.
11. (Original) The method of claim 9 further comprising a step of using the regenerated metal halide eluent to elute further nitrate ions from the ion exchange resin.

12. (Original) The method of claim 9 wherein the step of reducing and oxidizing are performed in a cathode and anode compartment that are coupled to each other via a diaphragm.
13. (Original) The method of claim 9 wherein the cathode comprises a carbon felt and the anode comprises platinized titanium.
14. (Original) The method of claim 9 wherein the metal halide is sodium chloride.
15. (Original) The method of claim 9 wherein alkalinity of the eluent is maintained at a value between pH 7.0 and 9.5.
- 16-21. (canceled)